

Dengue Fever in Tokyo: Talking Points

What's going on?

The Japanese Ministry of Health, Labor, and Welfare has confirmed that as of 4 Sept 2014, there have been 56 cases of dengue fever acquired in Tokyo's popular Yoyogi Park. Every year Japan reports many cases of dengue fever in patients who contracted the disease while traveling abroad. The current cases are remarkable in that the patients were infected with the disease in Japan, something which hasn't happened in 70 years.

What is dengue fever?

Dengue fever is caused by a virus transmitted to humans by mosquitoes infected with the dengue virus. Dengue fever is not transmitted from person to person. Symptoms include fever, headache, muscle and joint pain and a rash. Most people recover fully. There is no specific treatment and no vaccine. It rarely occurs in the southern United States, but is widespread in Puerto Rico and in many parts of Latin America, Southeast Asia, Africa, and the Pacific islands.

What is being done in response?

The Tokyo Metropolitan Government has temporarily closed most of Yoyogi Park and is performing pesticide applications, taking measures to eliminate mosquito breeding sites, and surveying for the presence of infected mosquitoes. Japan's National Institute of Infectious Diseases (NIID) has alerted prefectural governments to be on the lookout for more cases, and does not anticipate a widespread outbreak because the approaching cool weather will effectively kill any of the mosquitos carrying the virus. In addition, a mosquito's life cycle is short and their flight range is small (around 50 meters), which greatly limit the time and territory in which they can transmit the virus. Military mosquito surveillance programs at USAG-J Camp Zama and Yokota AB are ongoing—dengue has not been found in any of the mosquitoes collected.

Should I be concerned about getting dengue in Japan?

The risk is low. Mosquitoes carrying dengue virus are not expected to spread outside of the immediate vicinity of Yoyogi Park. If you have plans to visit the area in the near future, it would of course be prudent to take mosquito bite precautions, i.e., stay out of shady areas, leave before dusk, use an insect repellent containing DEET or Picaridin on exposed skin and wear long sleeves and pants.

What are the chances that dengue will be a problem in Japan in the future?

It's unlikely that dengue will be an ongoing problem. Japan does not have the *Aedes aegypti* mosquito species which is primarily responsible for transmitting the disease in tropical areas and which readily survives in urban areas. The mosquito responsible for the Yoyogi cases is most likely *Aedes albopictus*, which generally does not survive well in urban areas.

Where can I find more information?

A concise and informative "Just the Facts" handout about dengue fever is available for download at: <http://phc.amedd.army.mil/PHC%20Resource%20Library/Dengue.pdf>. More in-depth information is readily available on the Center for Disease Control's dengue page: <http://www.cdc.gov/dengue/>